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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/565,658

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Masahiko Kubota

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EXAMINER

DAHIMENE, MAHMOUD

ART UNIT

PAPER NUMBER

1713

MAIL DATE

DELIVERY MODE

12/16/2011

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/565,658	Applicant(s) KUBOTA ET AL.	
	Examiner MAHMOUD DAHIMENE	Art Unit 1713	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 May 2010.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ An election was made by the applicant in response to a restriction requirement set forth during the interview on ____; the restriction requirement and election have been incorporated into this action.
- 4) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 5) ☒ Claim(s) 1-3,5-10 and 12 is/are pending in the application.
- 5a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 6) ☐ Claim(s) ____ is/are allowed.
- 7) ☒ Claim(s) 1-3,5-10 and 12 is/are rejected.
- 8) ☐ Claim(s) ____ is/are objected to.
- 9) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 10) ☐ The specification is objected to by the Examiner.
- 11) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 12) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-302) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____. |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 5/27/2010 has been entered.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claim 1 and all dependent claims are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. the term "a basic material having a pair of nonshared electrons" is unclear as to what the pair of electrons is not shared with. Are they not shared with other atoms in the molecule, are they not shared with other materials or are they not shared with other molecules in the material. Any atom heavier than helium appears to have a pair of nonshared electrons in the "s" orbital, is that what the applicant is claiming? The specification do not provide any definition of the term. The expression "such as" in page 18, line 1, of applicant's specification does not constitute a definition of the term.

Double Patenting

4. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the “right to exclude” granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

5. Claims 1-3, 5-10, 12, are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-11 of U.S. Patent No. 7,629,111. Although the conflicting claims are not identical, they are not patentably distinct from each other because the combination of limitations in the claims of the instant application and the combination of the limitation of the claims in U.S. Patent No. 7,629,111 are written in different permutations that would result in the manufacturing of a similar structure.

U.S. Patent No. 7,629,111 claims "A method for manufacturing a liquid discharge head including a flow path which communicates with a discharge port used to discharge a liquid, and a substrate on which an energy generating element for generating energy that is used to discharge liquid is arranged, the method comprising: providing, on the substrate, a first positive type photosensitive material layer that is exposed to ionizing radiation of a first wavelength; providing, on the first positive type photosensitive material layer, a second positive type photosensitive material layer of a composition containing a copolymer of methacrylic anhydride (acid) and methacrylate ester and that is exposed to ionizing radiation of a second wavelength that is different from the first wavelength; heating the second positive type photosensitive material layer at a temperature of 120.degree. C. to 150.degree. C.; patterning the heated second positive type photosensitive material layer to form a second solid layer for forming a part

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of the flow path by irradiating the ionizing radiation of the second wavelength to the second positive type photosensitive material layer; irradiating the ionizing radiation of the first wavelength to the first positive type photosensitive material layer to form a first solid layer for forming another part of the flow path; providing a coating layer so as to coat the first and second solid layers; forming the discharge port reaching the second solid layer through a photolithographic process comprising exposing and developing the coating layer; and removing the first and second solid layers to form a the flow path, wherein a material used for the coating layer contains a cationically polymerizable chemical compound, a cationic photopolymerization initiator and an inhibitor of cationic photopolymerization." (claim 1 of U.S. Patent No. 7,629,111).

U.S. Patent No. 7,629,111 also claims the following:

3. A method according to claim 2, wherein the methacrylate ester is a methyl methacrylate.
4. A method according to claim 1, wherein the inhibitor of cationic photopolymerization is a basic material having a pair of nonshared electrons.
6. A method according to claim 5, wherein the nitrogen-containing compound is an amine compound.
9. A method according to claim 1, wherein the coating layer is applied on the first and second solid layers using a liquid mixture of methyl isobutyl ketone and xylene as a solvent, and in the photolithographic process, a part of the coating layer corresponding to the discharge port is removed using a liquid mixture of methyl isobutyl ketone and xylene as a liquid developer.

10. A method according to claim 1, wherein the composition includes a solvent.

11. A method according to claim 10, wherein the solvent is diglyme.

A difference is noted between the order of the limitations in the claims of instant application 10565658 and the order of the limitations in the claims of U.S. Patent No. 7,629,111. It appears the claims have overlapping steps, however, they are defined in different order in the dependent claims.

However, it would have been obvious to one of ordinary skill in the art at the time the invention was made that the combination of steps in each of the patent and application claims would result in the production of a similar structure because the main difference between the sets of claims appears to be just the arrangement of the order the limitations are claimed.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MAHMOUD DAHIMENE whose telephone number is (571)272-2410. The examiner can normally be reached on week days from 8:00 AM. to 5:00 PM..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nadine Norton can be reached on (571) 272-1465. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/M. D./

Examiner, Art Unit 1713

/Nadine G Norton/

Supervisory Patent Examiner, Art Unit 1713